

SunLED www.SunLEDusa.com

T-1 (3mm) Solid State Lamp

Features

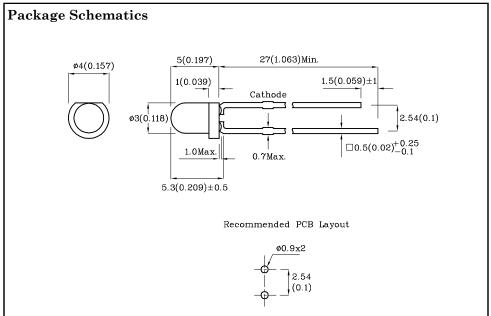
- Radial / Through hole package
- \bullet Reliable & robust
- Low power consumption
- Available on tape and reel
- RoHS Compliant







ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25 (0.01")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		Red (AlGaInP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V		
Forward Current	I_{F}	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	185	mA		
Power Dissipation	P_{D}	75	mW		
Operating Temperature	$T_{\rm A}$	T_A -40 ~ +85			
Storage Temperature	Tstg	-40 ~ +85	°C		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds				
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds				

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics ($T_A=25$ °C)		Red (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	1.95	V
Forward Voltage (Max.) $(I_F=20 \text{mA})$	V_{F}	2.5	v
Reverse Current (Max.) $(V_R=5V)$	I_R	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λΡ	645*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	630*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$\triangle \lambda$	28	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	35	pF

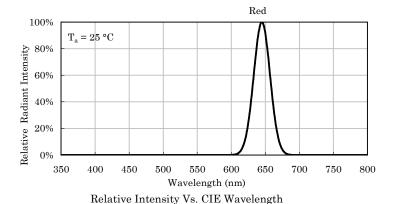
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λΡ	Viewing Angle 20 1/2
				min.	typ.		
XLMDK34D	Red	AlGaInP	Red Diffused	500 100*	795 248*	645*	60°

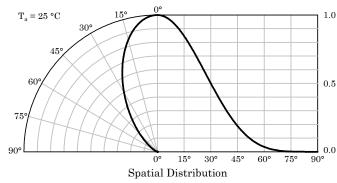
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

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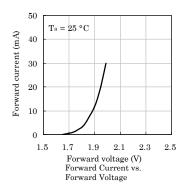


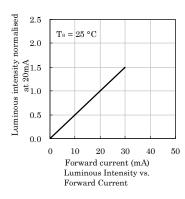


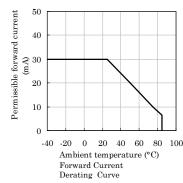


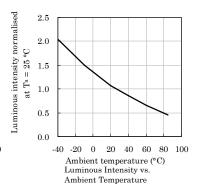


❖ Red

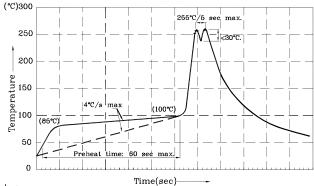








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

1.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C 2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec

(5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above $85\,^\circ\text{C}.$ 4.Fixtures should not incur stress on the component when mounting and

during soldering process. 5.SAC 305 solder alloy is recommended.

6. No more than one wave soldering pass

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength),

the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous Intensity / Luminous Flux: +/-15%

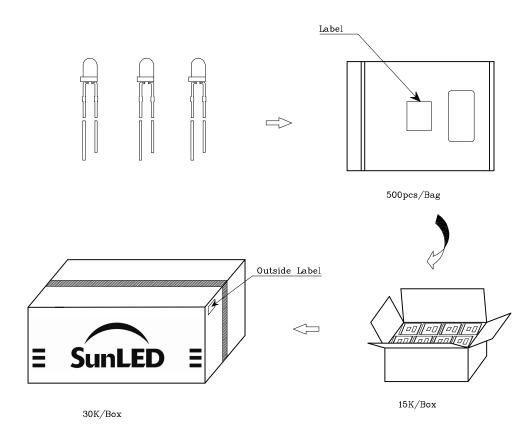
3. Forward Voltage: +/-0.1V

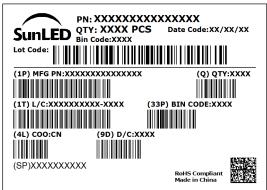
Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS





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